# Findings of corticosteroids in samples collected from Lance Armstrong during the 1999 Tour de France

This document explains how the presence of corticosteroids (*triamcinolone acetonide*) in four urine samples taken from Lance Armstrong during the 1999 Tour de France was assessed and dealt with by the French Authorities and by the UCI Anti-doping Commission in July 1999.

It should be stressed that this case was handled knowing only the facts which were apparent at that time. For example, the UCI did not know that the medical certificate handed over to Dr. Schattenberg, a member of UCI's Anti-doping Commission, in July 1999 had been post-dated. Armstrong only admitted this during his interview with Oprah Winfrey, which was broadcast on 17 January 2013.

### **Testing for corticosteroids**

As with EPO, corticosteroids were on both the IOC's and UCI's prohibited list long before there was an anti-doping test to detect their presence in samples taken from athletes.

The UCI was the first organisation to conduct tests for corticosteroids – using a test introduced by the UCI in the 1999 Tour de France.

On 29 June 1999, just four days before the start of the 1999 Tour de France (on 3 July), the IOC and the UCI were informed by the anti-doping laboratory of Châtenay-Malabry, in Paris, that a test for glucocorticosteroids (a group of corticosteroids) had become available.

Despite there being only four days before the start of the Tour de France, the UCI decided nevertheless to have samples taken during that Tour analysed for corticosteroids. This was a brand new procedure for both the UCI and for the riders themselves.

### The status of corticosteroids under 1999 French law

As remained the case up to 2006, all anti-doping tests in France were carried out by the French Ministry for Youth and Sports and governed by French law.

The samples taken during the 1999 Tour de France were taken by a medical doctor appointed by the French ministry, with the assistance of a UCI anti-doping inspector.

The then prohibited list under French law ('the French list') was enacted by the Ministerial decree of 12 November 1998 (*Journal officiel de la République française*, 15 December 1998, p. 18826).

The status of corticosteroids is set out under section I.D of the French list, which reads (free translation from French):

The use of corticosteroids is prohibited except:

A – For topical application (anal, auricular, dermatological, nasal or ophtalmological) but not rectal;

B – By inhalation;

C – By intra-articular or local injection

An obligatory notification by athletes applying for the use in-competition of corticosteroids by inhalation for the treatment of asthma has been introduced. A team doctor who wants to administer corticosteroids to a participatant by local or intra-articular injection, or by inhalation, has to notify the medical authority in writing prior to the competition.

These French rules imply that topical application of corticosteroids is not prohibited – and that no prior notification, or medical prescription, is required. This applies in particular to dermatological applications, such as the use of a skin cream.

## The status of corticosteroids under the 1999 Olympic Movement Anti-Doping Code

Appendix A to the 1999 Olympic Movement Anti-Doping Code lists the 'Prohibited classes of substances and prohibited methods'.

The status of corticosteroids is set out in section III.D as follows:

The systemic use of corticosteroids is prohibited.

Anal, aural, dermatological, inhalational, nasal and ophthalmological (but not rectal) administration is permitted. Intra-articular and local injections of corticosteroids are permitted. Where the rules of a responsible authority so provide, notification of administration may be necessary.

This rule clearly states that the dermatological use of corticosteroids is allowed and that such use would not constitute an anti-doping rule violation. Similarly, intra-articular and local injections of corticosteroids are also permitted under the rule.

The status of corticosteroids under the 1999 UCI prohibited list

In the years prior to the introduction of the WADA Prohibited List, the UCI adopted its own 'List of categories of doping substances and methods'. That list was based upon the list established by the IOC.

Section III-C, par. 2 reads as follows:

The use of corticosteroids is prohibited, except when used for topical application (auricular, ophtalmological or dermatological), inhalations (asthma and allergic rhinitis) and local or intra-articular injections. Such forms of utilisation are to be proved by the rider with a medical prescription.

Whereas the French list and the IOC list did not require a medical prescription, the UCI list required a medical prescription as proof of a topical application of corticosteroids, for example a skin cream.

However, the UCI list did not require the rider to present the medical prescription prior to the competition, or prior to the doping test, or during the doping test.

#### Article 43 of the 1999 UCI Anti-doping examination regulations

Par. 3 of article 43 read as follows:

The rider must indicate on the form any drugs listed on the list of classes of doping substances and methods which he has taken but which may not be taken into consideration under the medical conditions specified in the same list. If he hasn't and any such substance is found by the laboratory, the test result shall be considered as positive and the rider shall be sanctioned even when he produces a medical certificate after the test.

### <u>Test results for Lance Armstrong in the 1999 Tour de France</u>

The 1999 Tour de France started on 3 July and finished on 25 July.

During the Tour, Armstrong was tested 15 times. In the four samples indicated below traces of triamcinolone, a corticosteroid, were found. No other prohibited substances were found.

(Note: in 1999, no test had yet been developed that could detect EPO, so the samples taken during the 1999 Tour de France were not tested for EPO. In 2005, samples taken from Lance Armstrong at the 1999 Tour de France were retested in a scientific research program of the anti-doping laboratory of Châtenay-Malabry, Paris. According to the research results EPO was found in Armstrong's samples. As indicated by the laboratory, and later also in the Vrijman report, these research results did not constitute valid proof of the presence of EPO under the anti-doping rules. Until his public confession in an interview with Oprah Winfrey broadcasted on 17 January 2012, Armstrong has always denied that he had ever used EPO.)

3 July	negative test result
4 July	presence of traces of triamcinolone acetonide
11 July	negative test result
13 July	negative test result
14 July	presence of traces of triamcinolone acetonide
15 July	presence of traces of triamcinolone acetonide
16 July	negative test result
17 July	negative test result
18 July	negative test result
20 July	negative test result
21 July	presence of triamcinolone acetonide
22 July	negative test result
23 July	negative test result
24 July	negative test result
25 July	negative test result

The analysis reports were sent to the UCI, the French Ministry of Youth and Sports and Dr. Grosset-Janin, the doping control officer appointed by the French Ministry who had taken the samples during the 1999 Tour de France. The reports for the samples taken on 4 and 14 July mention that a copy was also sent to the French Cycling Federation.

### Elements for the assessment of the test results

1. Normally a rider might be tested a couple of times in any given year. When a rider is tested, that test might take place weeks or even months after the rider was previously tested. As such, each test is simply a snapshot in time.

A stage race such as the Tour de France, with a prologue and 20 stages, offers a unique situation in sport, because the athletes are available to be tested over a continuous period of more than three weeks. In addition, UCI rules stipulate that the leading rider in the general classification after each stage must be tested. (So any rider who knows that he will wear the yellow jersey – or at least has a chance of doing so – also knows that he will be tested).

At the 1999 Tour de France, Armstrong wore the yellow jersey for 15 days: on 3 and 4 July and then continuously from 11 until 25 July. He was tested on each of these days, except on the rest days (12 and 19 July).

As a result, the testing of Armstrong during the 1999 Tour de France was not simply a snapshot. Instead, it was a longitudinal process similar to the blood passport, in that there were 15 test results over a 23-day period.

2. If corticosteroids are administered by way of oral administration, or by injection – the so-called 'systemic use' – a single administration would result in the substance showing up clearly in samples taken for at least one week after its administration.

If, on the other hand, corticosteroids are administered dermatologically – which is not forbidden – their administration might not be detected in a urine sample, or else would show only a slight presence over a very short period of time.

# The assessment of the test results by the French Ministry

The samples taken during the 1999 Tour de France were analysed by the French National Anti-Doping Laboratory in Châtenay-Malabry.

The French Ministry came to the conclusion that there had been no anti-doping rule violation. In a conversation with the UCI's Dr. Schattenberg at the time, the French Ministry doctor confirmed that the presence of traces of corticosteroids found in samples taken from Armstrong was compatible with the use of a skin cream; that the use of a skin cream was accepted as proven by the French Ministry; and that there was therefore no anti-doping rule violation.

The French Ministry's assessment was made possible because of the particular nature of a stage race, where the same athlete is tested a number of times over several days. The sequence of consecutive test results, alternately showing or not showing the presence of traces of corticosteroids, provides evidence that would not be available if an athlete is only tested a couple of times a year with long intervals between.

If the corticosteroids had been used systemically (ie. injected or taken orally), the consecutive test results would have all been positive.

There was also a commission of the French Ministry ('commission d'interprétation') which was in charge of examining therapeutic justifications for findings of prohibited substances. To the UCI's best knowledge, Armstrong was never summoned to provide a medical justification for the findings that the Paris lab had reported. This means that the French Ministry was completely satisfied that the corticosteroids had been used in a way that was not forbidden and that no further justification therefore needed to be provided.

No disciplinary proceedings were therefore set in motion against Armstrong by or at the request of the French authorities.

### The assessment of the test results by the UCI

1. When the UCI learned of the first laboratory report showing the presence of traces of corticosteroids in Armstrong's sample taken on 4 July, Dr. Schattenberg called either Armstrong's team manager or team doctor to ask whether there was a medical

prescription. Dr Schattenberg was told there was a medical prescription for Cemalyt cream and that this prescription would be provided to him. The prescription was handed over to Dr Schattenberg, either on the same day or the day after.

The document is a statement by US Postal team doctor del Moral dated 3 July 1999 and reads:

3/7/99 Armstrong

The rider has been using during the 2 and 3 of July:

Cemalyt: Calendula (extr)

Placenta (extr) Triamcinolone

for the reason of present a allergical inflamatory dermatitis (sic).

Dr Schattenberg consulted Werner Göhner, who was President of the Anti-doping Commission and Vice-president of the UCI, as well as being a lawyer.

Following this consultation, the document was accepted as the medical prescription required by the UCI list. As noted above, the list does not require that the medical prescription be presented prior to the competition, or prior to or at the sample collection. A medical prescription presented after the test fulfils the requirement of the UCI list.

A similar document, dated 11 July 1999, was presented the following time that Armstrong was tested. And from 11 July 1999, his first test following the test of 4 July, Armstrong mentioned on every doping control form that he was using a skin cream containing triamcinolone.

2. Despite the requirement of article 43 of the UCI's Anti-doping examination regulations, it is a fact that Armstrong did not mention the use of corticosteroids, or the use of a medicine containing corticosteroids, on his doping control form of 4 July. In fact, the doping control form says: 'medicines used: none'. This was apparently written down by the French Ministry of Youth and Sports anti-doping control officer, Dr. Michel Grosset-Janin.

It is not known what questions Dr. Grosset-Janin asked Armstrong about medicines, or whether any such questions would have covered the use of a skin cream, rather than only forbidden forms of administration (medicines, pills or injections). Given that the use of a skin cream was not forbidden under French law and no prescription was required, it is possible that no questions were asked about this. According to the French newspapers *Libération* (22 July 1999) and *Le Monde* (23 July 1999), Armstrong told journalists on 21 July that he didn't know he had to present a medical certificate for a skin cream (as opposed to pills, injections, or inhalations).

In any event, in 1999 the UCI Anti-doping Commission concluded that there had been no anti-doping rule violation and that Armstrong should not be sanctioned on account of article 43.

That decision was based upon the following reasoning:

While Article 43 requires that the rider mention any medicine used in order to benefit from the non-prohibited status of the corticosteroids contained in them, this requirement is a rule of evidence. Article 43 aims to find a way to establish, to the greatest extent possible, that any corticosteroids found in a sample originate from a non-prohibited way of administration.

Article 43 does not prevent a judgement that corticosteroids were used in a non-prohibited way, in particular if there is other supporting evidence apart from the medical prescription. If this other evidence shows that the corticosteroids were used in a non-prohibited way, Article 43 is fulfilled – and there are no grounds for applying the sanction provided in the article.

(It should also be noted that article 43 was amended on 1st March 2000 after the introduction of the health record booklet – see below.)

The specific circumstances of a stage race – in other words, with samples taken on consecutive days and/or over an extended period of time – was sufficient to determine how the corticosteroids had been administered.

The topical use of corticosteroids was established by the fact that the trace of triamcinolone of 4 July showed up the day after a sample was taken where no triamincolone was found. A systemic use of triamcinolone after the test of 3 July and before the test of 4 July would have resulted in a high concentration in the sample of 4 July and would also have shown up in the samples taken on 11 and 13 July.

The topical use of triamcinolone was further confirmed by the fact that in a series of 15 test results there were 11 negative results – and only 4 results showed the presence of triaces of triamcinolone:

- 1. the trace of 4 July showed up after a negative sample taken on 3 July
- 2. the traces of 14 and 15 July showed up after two negative samples taken on 11 and 13 July and were followed by negative samples taken on 16, 17, 18 and 20 July.
- 3. the sample showing triamcinolone and taken on 21 July was taken after the consecutive negative samples of 16, 17, 18 and 20 July and was followed by the negative samples of 22, 23, 24 and 25 July.

Based upon these facts, both the French Ministry and the UCI Anti-doping Commission found that there was conclusive evidence that no anti-doping rule violation had taken place. In view of this weight of evidence, the UCI Anti-doping Commission also found that the aim of Article 43 had been fulfilled and that there was no grounds for

sanctioning Armstrong as if he had taken a forbidden substance – for the sole reason that he had omitted to mention the use of the substance when undergoing doping control. Indeed, as was confirmed by legal advice, any such sanction would have no justification, would be out of proportion and would not stand up in court.

#### Press release

After press articles mentioned the finding of triamcinolone in Armstrong's sample of 4 July 1999 (including *Le Monde* on 21 and 23 July, and *Libération* on 22 July) the UCI published the following press release on 21 July 1999:

# COMMUNIQUE DE PRESSE Press Release

Date: 21 July 1999

Information on UCI anti-doping controls is based on two principles:

- in the event of a positive result confirmed during a stage race, the information is given firstly to the rider and his team, and then to the media;
- in the event of a positive result caused by medical treatment (to which every rider is entitled!),
   the UCI sees to it that medical secrecy is fully respected, ensuring that the data in question is
   kept confidential.

We confirm that the controls performed up to 19th July during the Tour de France have all produced negative results.

Without prejudice to the medical secrecy which the UCI fully wishes to maintain, but at the express request of Lance Armstrong and his team, taking into account the exceptional situation brought about by certain publications, the UCI is making an exception to this principle by confirming that:

the rider used the ointment Cemalyt (which contains triamcinolone) to treat a skin allergy. The medical prescription has been shown to the UCI. The rider was tested on 3rd July 1999 after the prologue, and the result was negative, with no trace of corticosteroids. The rider was tested again on 4th July, and on this occasion minute traces were detected. The result of the tests on these two dtes unquestionably demonstrate that there was no systematic use.

The UCI recalls that the use of corticosteroids is restricted as follows in the IOC/UCI list:

#### Figure III Classes of drugs subject to certain restrictions

C: The use of corticosteroids is prohibited, except when used for topical application (auricular, opthalmological or dermatological), inhalations (asthma and allergic rhinitis) and local or intra-articular injections. Such forms of utilisation are to be proved by the rider with a medical prescription. In view of all these elements, the UCI, after discussing the case with the competent French authorities, affirms in the strongestterms that such use is permitted by the rules, and therefore does not constitute any form of doping.

We should like to ask all press representatives to be aware of the complexity of doping issues and the related aspects of the rules and the law before producing their publications.

This will allow considerations of a rather superficial, not to say unfounded nature to be avoided. It is indeed surprising to read that testosterone/epitestosterone ratios are used to indicate the concentration of corticosteroids.

We are often faced with questionable conclusions which damage the integrity of the riders who, it should not be forgotten, have rights too.

**UCI Press Services** 

Neither the media articles nor the UCI press release prompted either the French Ministry or the IOC to question or review the decision, so confirming that, for these two authorities, it was proven there had been no anti-doping violation.

#### Health booklet and the amendment of article 43

During the second half of 1999 the UCI prepared a new way for riders to document the use of the substances on the prohibited list (such as beta-2-agonists and corticosteroids) that athletes were allowed to use under certain circumstances.

On the one hand, the introduction of tests for corticosteroids increased the number of occasions when riders were required to provide medical prescriptions (as well as the number of potential disputes in this respect). On the other hand, notwithstanding the fact that IOC rules as well as those of other authorities (such as the French Ministry of Youth and Sports) did not require medical prescriptions, or any other kind of justification, the UCI did not want to abandon the requirement of providing medical prescriptions. The UCI aim was to restrict the use of these substances, not only for anti-doping but also for health purposes.

As a result, the UCI produced its 'health booklet'. In this booklet, riders were required to note all uses of substances that were subject to any form of anti-doping restriction — and the booklet had to be shown when passing doping control. The booklet also mentioned the quarterly health checks that every rider had to undergo under the UCI's health regulations.

When the health booklet was established, the relevant paragraph of Article 43 was replaced with the following clauses, as per 1st March 2000:

The rider must indicate on the form any drugs or method listed on the list of classes of doping substances and methods which he has taken or used but which may not be taken into consideration under the medical conditions specified in the same list.

In order to appreciate whether the medical conditions are answered in the case of a rider who is a member of a TTI of TTII, only the substances or treatments registered in the health record booklet shall be taken into consideration. If the conditions are not answered according to the entries in the health record booklet, the rider is declared positive.

An omission to mention the substances concerned on the doping control form was no longer sanctioned as such. However, the obligation to mention the substances was maintained as it provided useful information for the laboratory when analysing the sample and for the results management process.

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